

## Theory of Operation/Technical Description – FCC ID: VW4A091745

### - RF circuit function:

The IEEE 802.15.4 compliant transceiver inside the product generates a modulated carrier wave at 905 MHz - 925 MHz with 10 IEEE 802.15.4 channels. This transceiver circuit is used by applications as a physical layer for ZigBee applications.

### - RF signal flow:

The Transceiver IC outputs a differential RF signal- RFP & RFN which then passes through the RF path till the antenna and gets radiated or vice versa during reception

### - Description of Antenna system:

The Balun in the RF path converts the differential RF signal into a single ended 50 ohm side where it is fed to the Antenna connector after passing through tuning elements present to ensure compliance.

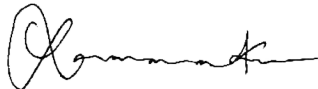
### - Compliance with 15.203 antenna requirements:

FCC 15.203 requirements for this design are tested and verified during FCC compliance testing.

### - Description of all modulation schemes used in the product:

Module uses BPSK and O-QPSK with pulse shaping.

Saravanakumar Marudhachalam



Manager, Tools HW Development